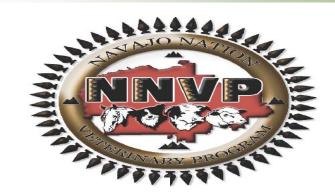
## Navajo Veterinary & Livestock Program

## Lupine Spring 2011

Chinle Clinic (928) 674-2069 Shiprock Clinic (505) 368-1007 Window Rock Clinic (928) 871-6615



## Livestock Advisory—Lupine



Blue—Purple Lupine



(Lupinus spp.)

ing, convulsions, coma and death. Livestock that graze on Lupine with a fungus can cause additional symptoms in livestock of severe liver, kidney and muscle disease. Poor growth in sheep and sometimes cattle has been reported.

Livestock owners in the Western Agency of the Navajo Nation, Lupine has been observed by our tribal veterinary staff— Check your range. Lupine is a noxious weed and is a poisonous plant for all livestock. Lupine is a perennial (continuing each year) plant with a distinctive leaf structure called palmately, compound leaves each with 5-17 leaflets. The plants grow up to 3 feet in height with white, bluepurple, red or yellow flowers. Principal Toxin All parts of the Lupine plant is poisonous. The dried plant is also considered to be toxic. The toxin from eating Lupine causes fetal deformity—Crooked Calf Disease. Crooked calf disease is found in calves born to cows that consume toxic lupine early in pregnancy. Affected calves may have varying degrees of deformities: beginning with

Lupine showing typical palmate leaf and flowers (L, leucophyllus)

contracted tendons to extreme bone malformations. Toxicity to livestock includes a nervous syndrome. Acute (rapid disease onset) fatal disease in sheep and rarely in cattle and horses. The sheep have muscle tremors, noisy labored breath-

## Crooked Calf Disease



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